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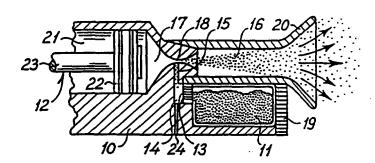
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(54) Tide: AN ORAL INHALER



(57) Abstract

An oral inhaler for use in inhaling a powdered or particulate medical product comprises a chamber (14) for containing the medical product, a mixing chamber (16), a gas flow passage (17) connected to the mixing chamber, and a pressure gas source or pumping device (40) for briefly providing in the gas flow passage a vigorous gas flow directed towards the mixing chamber. In order to obtain a high velocity of the gaz flow, the gas flow passage (17) has nozzle-like restriction (18). The product chamber (14) is communicating with the gas flow passage (17) at the restriction (18) or adjacent thereto so as to draw product from the product chamber into the gas flow by ejector effect, whereby the product is disintegrated in small respirable particles, which are thoroughly mixed with the gas flow. A product reservoir (11) may be provided for containing a product supply sufficient for several inhalation procedures. The swedical product may, for example, be transferred from a product reservoir to product chambers or metering chambers (14), which are defined in a rotatable cylinder or drum (38). The pressure gas source may be a pumping device, such as a piston pump. However, the pumping device preferably comprises a pumping chamber having a springy, diaphragm-like wall part (40).